## Arnav Kumar

4400 University Dr. MSN: 1J3 Fairfax, VA 22030 USA (571) 201-0575 toz@gmu.edu talhaoz.com @tozCSS

### ARNAV KUMAR

• Address: 3C - 02 - 04, 52, Nanyang Walk, Singapore - 639928

• E-Mail: arnav1@e.ntu.edu.sg arnavkumar24@gmail.com

• Phone: +65 8499 8569

• GitHub LinkedIn Site

### Education

- University: Nanyang Technological University, Singapore (Aug 2010 Jun 2014)
  - Bachelor of Engineering (Honours) in Computer Science with a GPA of 4.75/5.
  - Minor in Business, Specialization in Intelligent Systems (expected).
  - Dean's List Academic Year 2012-13
  - Awarded President's Research Scholarship offered to the top 5% of the cohort Academic Year 2011-12
  - Awarded full scholarship for university education.
- High School: St. James' School, Kolkata (Graduated in May 2010)
  - Indian School Certification (ISC) 91%. (A Level Equivalent)
  - Indian School Certificate Examination Result (ICSE) 94%. (O -Level Equivalent)
  - 98% in Computer Science in both ICSE and ISC.

## Employment History

- IBM Corporation Software Engineering (iOS) Intern (May 2013 - Aug 2013)
  - Developed core components for a mobile port of IBM Security Access Manager for Enterprise Single Sign - On ISAM-ESSOm for providing single sign - on capabilities on the iOS platform.
  - Built the fully-featured, UIWebView based embedded browser which provides Web single sign - on capabilities within the App.
- IBM Corporation Software Engineering Intern (Jun 2012 Dec 2012)
  - Development Prototyped new mobile (iOS and Android) solutions aimed at enhancing user experience and security of sensitive user information. Explored and implemented methods of automated form
    filling techniques.
  - Quality Assurance Configuration and troubleshooting server side components of a new solution for Privileged Identity Management.
    Automated the user-creation process during load-testing, reducing time required at this stage by 66%.

# **Project Work**

- Final Year Project (Aug 2013 Present)
  - Developing a proof-of-concept game demonstrating interaction with real world objects virtually.
  - Interfacing a Kinect, an iPhone, and a projector with a central server to process motion.
- Twitter Visualizer Data Mining (Aug 2013 Oct 2013)
  - Led a team of 6 to develop an application (with a Django backend) to generate a timeline for the flow of Twitter hashtags across the globe and track local trends.
- Twitter Summarizer Natural Language Processing (Aug 2013 Oct 2013)
  - Developed an application (with a Java + Flask backend) to summarize and analyse the sentiment of Twitter users about a subjects after extracting descriptive phrases from related tweets.
- dBauggle Software Engineering (II) (Jan 2013 May 2013)

- Led a team of 6 to build dBauggle, an iOS word-game for children with special needs, built using the cocos2d framework.
- P.A.W.S. Software Engineering (I) (Feb 2012 May 2012)
  - Led a team of 5 to build P.A.W.S., a pet-centric social network (with a Django backend) for pet agencies and prospective pet owners to interact, start the process of adoption and provide location based services. [8]
- Pet Projects
  - Pebble Music Tweeter Pebble Watchapp + companion iOS app using the Twitter API and Pebble SDK to Tweet the currently playing music from the smartwatch. [9]
  - Keepr iOS app for users to keep track of uncommon objects and trigger memory flashes to recall their last placement. (Work in progress)
  - Heal The World A game to educate people about world issues and a platform to connect them with agencies if they want to volunteer. Built using Meteor.js.

#### Technical Skills

- Java, Objective-C, Python (& Django framework), Javascript, HTML/CSS and others.
- Represented NTU in International Collegiate Programming Competition (ACM-ICPC) Regionals held in Kuala Lumpur (2011).

### Relevant Courses

- Object Oriented Programming & Data Structures
- Software Engineering
- Database Systems
- Operating Systems
- Algorithms
- Advanced Algorithms
- Artificial Intelligence
- Natural Language Processing
- Data Mining.

## Extra - Curricular Activities

- President NTU Open Source Society Headed the management committee of the special interest club that promotes the hacker culture. (AY2012-13)
- IT (Media) Officer Computer Engineering Club (Student Council of the School) Steered the annual branding initiative, produced and redesigned the School's publication and organised the school's first Hackathon. (AY2012-13)

### **Interests**

- Reading, Writing, Sports (football, rugby).
- Played Rugby competitively for 8 years.
- Member of the NTU Rugby Squad between Sept 2010 and Aug 2011.